

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-8 (cancelled)

Claim 9 (new): A heat exchanger comprising:

a vacuum tube having an outer wall and an inner wall;

an inner tube adapted to hold a fluid, wherein an outer wall of the inner tube is arranged concentric to the outer and inner wall of the vacuum tube;

at least one heat-conducting element connecting the inner wall of the vacuum tube to a fluid-conducting pipe system; and

means for collecting and concentrating solar energy provided on a side of the inner wall of the vacuum tube facing away from the at least one heat-conducting element, wherein the at least one heat-conducting element is prestressed against the inner wall of the vacuum tube and the fluid-conducting pipe system.

Claim 10 (new): The heat exchanger as claimed in claim 9, further comprising N heat-conducting elements, wherein each heat-conducting element includes at least two radially extending spring elements each attached at a distance from one another on the fluid-conducting pipe system along the longitudinal axis of the fluid-conducting pipe system and on a heat-conducting baffle of the associated heat-conducting element, wherein $N \geq 2$, and attachment points of the spring elements of the successive heat-conducting elements each have an angular distance of $360/N$ degrees from one another in a section of the fluid-conducting pipe system.

Claim 11 (new): The heat exchanger as claimed in claim 10, further comprising:

a rod attached to each heat-conducting baffle or the fluid-conducting pipe system;

a sleeve attached to the fluid-conducting pipe system or the heat-conducting baffle; and

a spring element arranged in the sleeve.

Claim 12 (new): The heat exchanger as claimed in claim 9, wherein each heat-conducting element includes a C-shaped element defined along a cross-section of the heat exchanger, wherein the element includes two free ends, wherein the two free ends press against the inner wall of the vacuum tube and the fluid-conducting pipe system.

Claim 13 (new): The heat exchanger as claimed in claim 12, further comprising N heat-conducting elements, wherein $N \geq 8$, and the free ends are prestressed against the inner wall of the vacuum tube and the outer wall of the inner tube over an angular range between $180/N$ to $360/N$ degrees.

Claim 14 (new): The heat exchanger as claimed in claim 9, wherein each heat-conducting element extends in a spiral shape along a cross-section of the heat exchanger and covers an angle of at least 45 degrees.

Claim 15 (new): The heat exchanger as claimed in claim 14, wherein two of the heat-conducting elements are spaced apart from one another in an angular arrangement on the outer wall of the fluid-conducting pipe system over an angular range between 350 to 359 degrees or between 90 and 179 degrees.

Claim 16 (new): The heat exchanger as claimed in claim 9, wherein the fluid-conducting pipe system comprises an outer volume and an inner volume operable in a counter-current mode.

Claim 17 (new): The heat exchanger as claimed in claim 9, wherein the fluid is a heat-conducting fluid, and the fluid is contained within the inner tube.